Abstract ID : 90

Title : Behavior of a fin whale (Balaenoptera physalus) in relation to prey availability in the Ligurian Sea

Category : Ecology

Student : Not Applicable

Preferred Format : Poster Presentation

Abstract : During summer 2001 ICRAM started a pilot project aimed at studying habitat use and migration patterns of the Mediterranean fin whale. This study was carried out by using an Argos satellite tag coupled with VHF radio transmitter, attached by means of an 8 cm stainless steel dart. To verify the presence of potential prey items, we collected active acoustic data in the 0-250 meter depth range using Simrad EY500 equipped with a 120 KHz transducer split-beam ES 120-7G.
The fin whale considered by this report was tagged on July 24, 2001 at 11:30 AM in the Ligurian Sea. Fin whale's reactions to the approaching boat and to tagging operations is described considering the variation of blow intervals, surface times and number of blows during each surfacing. The statystical analysis of these parameters shows no significant differences before, during and after tagging. The tag was placed 4 meters behind the blowhole and the VHF signal transmitted was syncronous with the animal's surfacings. The radio tracking was carried on for 19 hours and 1276 fin whale's surfacings were recorded.
In this study we analyse the 19 hours of radio tracking to describe the day-time behaviour of a fin whale and, for the first time in the Ligurian Sea, the night-time behaviour. Our results suggest that the foraging activity is limited in space (about 25 km^2) and time of day (early morning and early evening) according to the availability of Mediterranean krill, Meganyctiphanes norvegica.
This study is limited to the behaviour of only one animal. It seems crucial that further studies should be conducted to confirm this behavioral pattern, both to improve our understanding of fin whale biology in the Ligurian Sea and to suggest management rules for this species in this area.